Application No Internat PCT/DE 03/03180

A CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N15/57 C12N9/50

A61K38/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

•			•	
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		Deleventa dele Me	
Category *	Citation of document, with indication, where appropriate, of the rele	vani passages	Relevant to claim No.	
X	DATABASE EMBL [Online] 18 September 2002 (2002-09-18), XP002287494 Database accession no. AY074514 abstract		1-5	
X	WO 02/02775 A (BASF AG; DEAR NE) BOEHM THOMAS (DE)) 10 January 2002 (2002-01-10) cited in the application abstract; claims 1-12	IL T (DE);	1-6,8	
	abstract, craims 1-11	-/		
:	•		112 + 1 1 + 1 + 1 1 + 1 + 1 + 1	
X Furt	her documents are listed in the continuation of box C.	X Patent family members are listed	in arriex.	
"A" docume consider the consideration that considerate the considerate that considerate the consideration that considerate the considerate the considerate that consi	ont which may throw doubts on priority claim(s) or is dited to establish the publication date of another n or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but han the priority date claimed	"" later document published after the interpretation or priority date and not in conflict with cited to understand the principle or the invention." "" document of particular relevance; the cannot be considered novel or cannot be considered to the cannot be considered to involve an independent of particular relevance; the cannot be considered to involve an independent is combined with one or ments, such combination being obvious in the art. """ document member of the same patent	claimed invention to be considered to cument is taken alone claimed invention wentive step when the one other such docu- us to a person skilled family	
	actual completion of the international search	Date of mailing of the international sea	arch report	
. 8	3 July 2004	L/ 3EF 2004		
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni,	Authorized officer Schneider, P		



International application No.
PCT/DE 03/03180

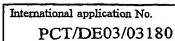
Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)			
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:				
1. X	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:			
	Although claims 6 and 8 relate to a method for treatment of the human or			
	animal body, the search was carried out and was based on the stated effects			
	of the compound or composition.			
	ClaimaNian			
2	Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:			
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).			
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)			
This In	ternational Searching Authority found multiple inventions in this international application, as follows:			
	See supplemental sheet			
	·			
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.			
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.			
, <u> </u>	As only some of the required additional search fees were timely paid by the applicant, this international search report			
ــا د	covers only those claims for which fees were paid, specifically claims Nos.:			
-				
	No required additional search fees were timely paid by the applicant. Consequently, this international search report is			
4. X	restricted to the invention first mentioned in the claims; it is covered by claims inos			
	1-9 All in part			
	and the second for the second			
Remai	The additional search fees were accompanied by the applicant's protest.			
	No protest accompanied the payment of additional search fees.			



Internat	Application No
PCT/DE	03/03180

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with Indication, where appropriate, of the relevant passages X HUANG YUANHUI ET AL: "The calpain family and human disease" August 2001 (2001-08), TRENDS IN MOLECULAR MEDICINE, VOL. 7, NR. 8, PAGE(S) 355-362, XP002287493 ISSN: 1471-4914 cited in the application the whole document X PERRIN B J ET AL: "Calpain" INTERNATIONAL JOURNAL OF BIOCHEMISTRY AND CELL BIOLOGY, vol. 34, no. 7, July 2002 (2002-07), pages 722-725, XP002287492 ISSN: 1357-2725 the whole document A ESKE, KRISTIN: "Zahllose Geheimmisse der Natur warten noch unter Wasser" BIOLOG, no. 3, 2000, pages 1-7, XP002263051 GREIFSWALD, ROSTOCK cited in the application the whole document A "Leben unter extremen Bedingungen"[Online] 31 January 2002 (2002-01-31), XP002287495 Retrieved from the Internet: URL:http://www.innovations-report.de/html/berichte/geowissenschaften/bericht-7421.ht ml> the whole document A DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121 abstract	FC1/DE 03/03100	
HUANG YUANHUI ET AL: "The calpain family and human disease" August 2001 (2001-08), TRENDS IN MOLECULAR MEDICINE, VOL. 7, NR. 8, PAGE(S) 355-362, XP002287493 ISSN: 1471-4914 cited in the application the whole document X PERRIN B J ET AL: "Calpain" INTERNATIONAL JOURNAL OF BIOCHEMISTRY AND CELL BIOLOGY, vol. 34, no. 7, July 2002 (2002-07), pages 722-725, XP002287492 ISSN: 1357-2725 the whole document A ESKE, KRISTIN: "Zahllose Geheimnisse der Natur warten noch unter Wasser" BIOLOG, no. 3, 2000, pages 1-7, XP002263051 GREIFSWALD, ROSTOCK cited in the application the whole document A "Leben unter extremen Bedingungen"[Online] 31 January 2002 (2002-01-31), XP002287495 Retrieved from the Internet: URL:http://www.innovations-report.de/html/berichte/geowissenschaften/bericht-7421.ht ml> the whole document A DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121	•	
and human disease" August 2001 (2001-08), TRENDS IN MOLECULAR MEDICINE, VOL. 7, NR. 8, PAGE(S) 355-362 , XP002287493 ISSN: 1471-4914 cited in the application the whole document X PERRIN B J ET AL: "Calpain" INTERNATIONAL JOURNAL OF BIOCHEMISTRY AND CELL BIOLOGY, vol. 34, no. 7, July 2002 (2002-07), pages 722-725, XP002287492 ISSN: 1357-2725 the whole document A ESKE, KRISTIN: "Zahllose Geheimnisse der Natur warten noch unter Wasser" BIOLOG, no. 3, 2000, pages 1-7, XP002263051 GREIFSWALD, ROSTOCK cited in the application the whole document A "Leben unter extremen Bedingungen"[Online] 31 January 2002 (2002-01-31), XP002287495 Retrieved from the Internet: URL:http://www.innovations-report.de/html/ berichte/geowissenschaften/bericht-7421.ht ml> the whole document A DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121	Relevant to claim No.	
INTERNATIONAL JOURNAL OF BIOCHEMISTRY AND CELL BIOLOGY, vol. 34, no. 7, July 2002 (2002-07), pages 722-725, XP002287492 ISSN: 1357-2725 the whole document A ESKE, KRISTIN: "Zahllose Geheimnisse der Natur warten noch unter Wasser" BIOLOG, no. 3, 2000, pages 1-7, XP002263051 GREIFSWALD, ROSTOCK cited in the application the whole document A "Leben unter extremen Bedingungen"[Online] 31 January 2002 (2002-01-31), XP002287495 Retrieved from the Internet: URL:http://www.innovations-report.de/html/berichte/geowissenschaften/bericht-7421.html> the whole document A DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121	1-5	:
ISSN: 1357-2725 the whole document A ESKE, KRISTIN: "Zahllose Geheimnisse der Natur warten noch unter Wasser" BIOLOG, no. 3, 2000, pages 1-7, XP002263051 GREIFSWALD, ROSTOCK cited in the application the whole document A "Leben unter extremen Bedingungen"[Online] 31 January 2002 (2002-01-31), XP002287495 Retrieved from the Internet: URL:http://www.innovations-report.de/html/berichte/geowissenschaften/bericht-7421.ht ml> the whole document A DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121	1-5	*
Natur warten noch unter Wasser" BIOLOG, no. 3, 2000, pages 1-7, XP002263051 GREIFSWALD, ROSTOCK cited in the application the whole document "Leben unter extremen Bedingungen"[Online] 31 January 2002 (2002-01-31), XP002287495 Retrieved from the Internet: URL:http://www.innovations-report.de/html/ berichte/geowissenschaften/bericht-7421.ht ml> the whole document DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121		
Retrieved from the Internet: URL:http://www.innovations-report.de/html/ berichte/geowissenschaften/bericht-7421.ht ml> the whole document DATABASE EMBL [Online] 15 January 2001 (2001-01-15), XP002287496 Database accession no. AB028639 abstract X,P DATABASE EMBL [Online] 22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121		
15 January 2001 (2001-01-15),		
22 July 2003 (2003-07-22), XP002287500 Database accession no. CF076121		
	1-5	
1		

PCT/ISA/ 21



The International Searching Authority has determined that this international application contains multiple (groups of) inventions, namely:

1. Claims: 1-9 (all in part)

Nucleic acid SEQ ID NO:1 coding for the protease calpain from *Fragliarius cylindrus*, the encoded polypeptide, method for the production thereof and the use thereof in cleaning and therapy.

2. Claims: 1-9 (all in part)

See 1st invention, SEQ ID NO:2 coding for zinc metalloprotease.



International Application No PCT/DE 03/03180

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 0202775 A	10-01-2002	DE AU CA WO EP JP US	10031932 A1 7060301 A 2414592 A1 0202775 A2 1294895 A2 2004503221 T 2004072174 A1	10-01-2002 14-01-2002 10-01-2002 10-01-2002 26-03-2003 05-02-2004 15-04-2004